



DEPARTMENT OF THE ARMY  
KANSAS CITY DISTRICT, CORPS OF ENGINEERS  
700 FEDERAL BUILDING  
KANSAS CITY MISSOURI 64106-2896

REPLY TO  
ATTENTION OF:

NOV 30 2006

Engineering and Construction Division  
Environmental Engineering Branch, Section F

Mr. Ruben Zamarippa  
Missouri Department of Natural Resources  
Hazardous Waste Program  
P.O. Box 176  
1738 East Elm Street  
Jefferson City, Missouri 65102-0176

Dear Mr. Zamarippa:

This letter is in regard to the Formerly Used Defense Site (FUDS) property B07MO0145, the Jefferson Barracks Rifle Range, near Barnhart, Missouri. We have reviewed this property per request from the Missouri Department of Natural Resources. Our review of the property included a FUDS Property File review, a records search at the National Archives Regional Office in Kansas City, and a search of resources on the Internet. The enclosed Reexamination Request Assessment Report concluded that further assessment of the site for potential munitions constituents contamination is warranted.

The point of contact for this action is Mr. Julius Calderon, Chemical Engineer, 816-389-3550. For information, a copy of this letter has been forwarded to Ms. Jamie Bernard-Drakey, Missouri Site Assessment Coordinator, U.S. Environmental Protection Agency, Region VII, 901 North 5th Street, Kansas City, Kansas 66101.

Sincerely,

Daniel D. Mitchell, PMP  
Project Manager

Enclosure

Site:	Jefferson Barracks Rifle Range
ID #	MON000 703433
Break:	1.3
Other:	11-30-06

40259984



SUPERFUND RECORDS

# **Reexamination Request Assessment Report**

## **Jefferson Barracks Rifle Range FUDS Property Number: B07MO0145**

### **1.0 Introduction**

This document reports the results of the U.S. Army Corps of Engineers' (USACE) assessment of the Missouri Department of Natural Resources (MDNR) request to re-evaluate the No Defense Action Indicated (NDAI) status of the Formerly Used Defense Site (FUDS) identified as the Jefferson Barracks Rifle Range, FUDS Property Number B07MO0145. The purpose of this assessment is to determine if credible evidence exists to recommend a FUDS-eligible project. Only upon this determination will a FUDS Property Screening process be initiated.

FUDS eligibility is defined in Engineering Regulation (ER) 200-3-1, § 3-1.5.1.1. Per this ER, a FUDS property is defined as real property that was under the jurisdiction of the Secretary of Defense and owned by, leased by, or otherwise possessed by the United States (including Governmental entities that are the legal predecessors of DoD or its components) and those real properties where accountability rested with DoD but where the activities at the property were conducted by contractors (i.e., Government-owned, contractor-operated [GOCO] properties) that were transferred from DoD control prior to 17 October 1986. The FUDS eligibility status of former DoD property is not affected by its being the current responsibility of another Federal agency.

### **2.0 Reassessment Activities**

MDNR requested USACE to reexamine the NDAI status of the Jefferson Barracks Rifle Range as an FY 2006 activity. In response, the USACE Kansas City District (CENWK) reviewed their Jefferson Barracks Rifle Range FUDS property file, conducted a National Archives Records Administration (NARA) document search, and researched resources available on the Internet.

#### **2.1 Review of CENWK Property File**

A review of the CENWK Property file for the Jefferson Barracks Rifle Range shows that there has never been any significant evidence found to recommend a FUDS project for the site. The Site Survey Summary Sheet (Attachment A), dated 06 January 1994, documents the first of at least three visits to the site by USACE personnel. Mr. Dan Ahern of CENWK conducted a site visit on 13 December 1993 and spoke with one of the property owners, Mr. Norville Krauss. Mr. Krauss stated there were two M-1 rifle ranges that faced south and a submachinegun range (which was on his property) that faced east. He stated that all three ranges used .30 caliber copper-jacketed ammunition and that the troops policed the area of cartridges after each practice. Furthermore, he stated that many people scavenged the berms of each range for spent projectiles. After the Government

returned the land to him, he razed the submachinegun berm and spread it out into his field. He had not found any projectiles in his field for quite some time. The owners of the M-1 ranges also razed their berms and graded them into their fields.

An Archives Search Report (ASR) was finished in October 1994 to assess the property for the presence of ordnance and explosive waste (OEW)/chemical warfare materials (CWM), which would now fall under the Military Munitions Response Program (MMRP). MMRP projects include response actions at FUDS properties related to military munitions and explosives of concern (MEC), military munitions constituents (MC), and/or recovered chemical weapons materiel (RCWM). According to the ASR, the property, which is near Barnhart, Missouri, was used for light weapons practice by troops from Jefferson Barracks in St. Louis County, Missouri. The authorization to acquire the land for the rifle range was given on 11 June 1943. In August 1943, DoD started leasing the 1,517.55 acres of land used for the rifle range. Prior to DoD use, the land comprising the Jefferson Barracks Rifle Range consisted of farmland. The Army made improvements on the site, including two 1,000-yard M-1 rifle ranges, a .45 caliber machinegun range, a mess hall, and storage buildings. ASR Site maps are enclosed as Attachment B. A 2,000-man bivouac or camp area was also available at the site. Troops using the range would march to the site from Jefferson Barracks and establish temporary cantonment areas for short amounts of time. Use of the rifle range was concluded by March 1944. By 30 June 1946, all leases covering the site were terminated by DoD and the land conveyed back to the previous owners. The site is currently owned by a number of private individuals and small businesses. Much of the land is farmland that has been plowed and planted over many times since DoD use.

The ASR states that USACE personnel from the St. Louis District conducted a second site visit on 21 September 1994 to investigate the presence of MEC/MC/RCWM at the site. The former M-1 ranges at the Jefferson Barracks Rifle Range faced south toward a hilly area. Troops would fire at targets located in front of a berm area 1000 yards from the firing point. The berms for these two ranges have been razed and replaced with Moss Hollow Road. The rocky bluff behind the berm area still showed some disturbances from the frontal impact of the small arms ammunition being fired at it. The site survey team inspected the former berm area and the bluffs located to the south. Due to the fact that, over the years, many people had scavenged the berms of each range for spent projectiles, no evidence of munitions was observed by the inspection team.

Mr. Krauss, the owner of the former .45 caliber machinegun range, was interviewed again for the ASR. He stated that he razed the berm and spread it throughout the field. The area of the range now consisted of his plowed and planted corn field. He did not remember finding any live munitions during this process nor did he remember finding any in his field for some time. He did remember finding a small number of slugs in the berm area.

Copper-jacketed .30 caliber and .45 caliber bullets were the only munitions known to have been used at the site. According to interviews conducted during the ASR, these munitions were trucked in and distributed by the troops from Jefferson Barracks. There was no evidence of CWM or conventional ordnance storage at the site.

The ASR concluded that there was no MEC/MC/RCWM contamination at the site and gave the site a Risk Assessment Code (RAC) rating of 5, which is a negligible risk rating for MEC/MC/RCWM contamination.

Another site visit by CENWK was documented in a Memorandum For Record (MFR) (Attachment C) dated 06 December 1996. This visit was for a supplemental review of the ASR and to reconfirm its findings. The site visit reconfirmed that the berms had been replowed into the ground by the owners and the fields returned to agricultural use. Inspection of the areas which had once been the back stops, revealed no surface evidence of MC waste such as small arms residue, nor any type of MEC. The site was given another RAC score of 5, with no further action recommended.

Although the site visits did not see any visible evidence of MEC or MC at the site, a potential soil pathway exists for lead contamination from the lead slugs of fired ammunition. Lead slugs, which could shatter on impact, were likely embedded in the berms that were spread throughout the farm fields and also underneath Moss Hollow Road. The visual inspections of the site may not be able to verify the existence/non-existence of lead contamination in the soil, and further assessment of the soil pathway for lead contamination is needed.

## **2.2 NARA Document Search**

A document search was conducted at the NARA – Archives II Facility, College Park, Maryland, in February 2006. Army memorandums found here stated that the rifle range was being considered for training use by Army Air Forces Units at nearby Scott Field, Illinois, in the summer of 1944. However, the training curriculum changed at Scott Field and the units there never used the rifle range.

## **2.3 Internet Research**

An Internet search was conducted for information related to the Jefferson Barracks Rifle Range. However, no site-specific history was obtained during the search. A site aerial photograph search of the terraserver-microsoft.com website found the 1996 aerial for the site and the Barnhart, Missouri, area. The property appears to be lightly developed and mostly farmland, as seen in Attachment D. Housing development was approaching the site from nearby Barnhart.

### **3.0 Conclusion**

The 1994 ASR concluded that there were no MMRP issues at the site, and a supplemental site visit in 1996 reconfirmed the ASR findings. However, visual inspections of the site did not evaluate the potential for lead contamination. A preliminary assessment of the site is recommended for this purpose.

**ATTACHMENT A**

**SITE SURVEY SUMMARY SHEET, 06 JANUARY 1994**

SITE SURVEY SUMMARY SHEET  
FOR  
DERP-FUDS SITE NO. B07MO014500  
THE FORMER JEFFERSON BARRACKS RIFLE RANGE, MISSOURI  
6 JANUARY 1994

SITE NAME: The former Jefferson Barracks Rifle Range (JBRR) is privately owned by numerous local citizens and is unnamed.

SITE LOCATION: Two miles east of Barnhart, Jefferson County, Missouri (see site map).

SITE HISTORY: DOD use began in 1943 with the lease of 1,517.55 acres. The Army constructed two 1,000 meter M-1 ranges, one sub-machine range, a mess hall, several storage/support structures and perimeter fencing. Troops would march (frequently at night) from Jefferson Barracks in south St. Louis to the JBRR for target practice. It was common for the troops to establish temporary tent camps and target practice for several days. In 1946, the leases were terminated. It is reported that the Federal Bureau of Investigation used the ranges for a short period after the Army vacated. The site is in residences and small farms.

SITE VISIT: A site visit was conducted on 13 December 1993 by Dan Ahern, CEMRK-ED-TD. He spoke with current property owner, Norville Krauss.

Mr. Krauss stated that the two M-1 ranges faced south and the sub-machine gun range (which was on his property) faced east (see site map). He commented that all three ranges used .30 caliber copper jacketed ammunition. He also stated that the troops policed the area of cartridges after each practice. Mr. Krauss reports that many people scavenged the berms of each range for spent projectiles.

After the Government returned the land to Mr. Krauss, he razed the sub-machine gun berm and spread it out into his field. He has not found projectiles in his field for quite some time. The owners of the M-1 ranges also razed the berms and graded them into their fields.

CATEGORY OF HAZARD: OEW

PROJECT DESCRIPTION: This report should be forwarded to the OEW Mandatory Center of Expertise for a determination of any further action.

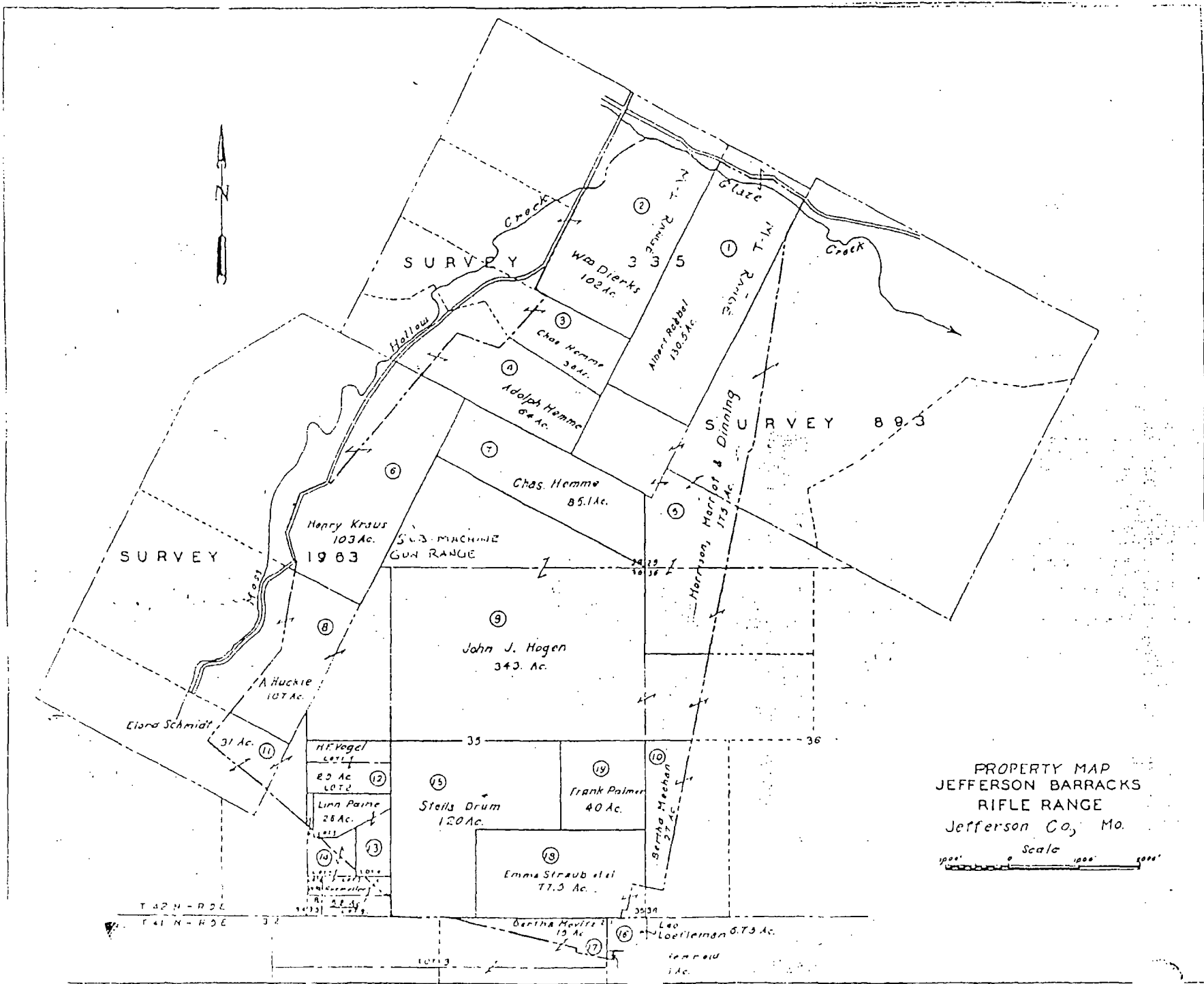
AVAILABLE STUDIES AND REPORTS: The Kansas City District's Real Estate records are on file.

PA POC: The Kansas City District's point of contact for the preliminary assessment is Dan Ahern at 816-426-2608, extension 3010.

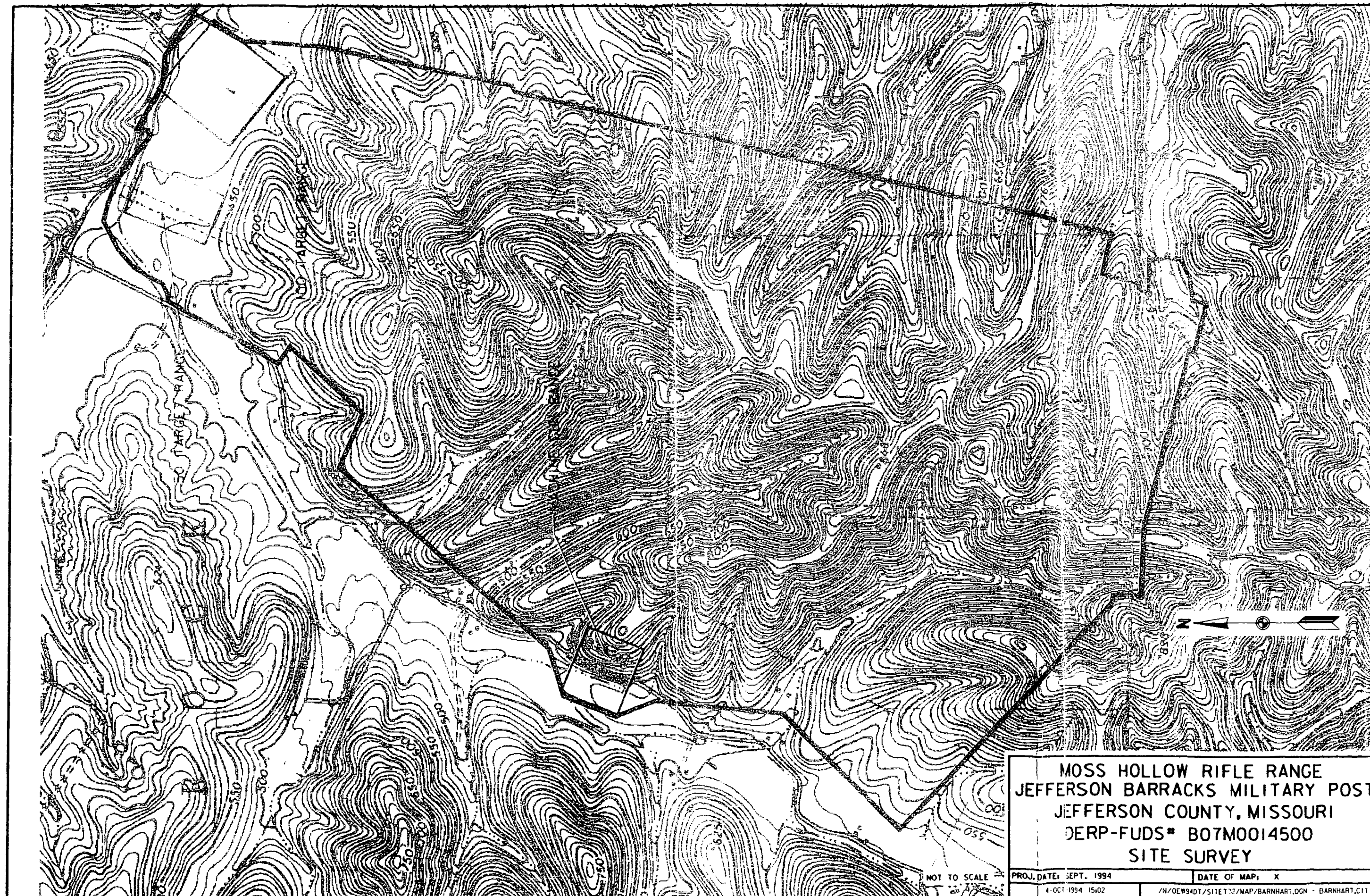


## **ATTACHMENT B**

### **MAPS FROM THE ARCHIVES SEARCH REPORT**



Mo. 5



MOSS HOLLOW RIFLE RANGE  
JEFFERSON BARRACKS MILITARY POST  
JEFFERSON COUNTY, MISSOURI  
DERP-FUDS# B07M0014500  
SITE SURVEY

PROJ. DATE: SEPT. 1994 DATE OF MAP: X  
4-OC1 1994 15:02 /N/OE#9401/SITET02/MAP/BARNHART.DGN - BARNHART.C11

**ATTACHMENT C**

**MEMORANDUM FOR RECORD, 06 DECEMBER 1996**

6 Dec 96

MEMORANDUM FOR RECORD

SUBJECT: Supplemental review of Jefferson Barracks Rifle Range, Archives Search Report, Project Number B07M0014501, for conventional ordnance.

1. A review was conducted of the original Jefferson Barracks Rifle Range, Archives Search Report for Chemical Warfare Materials, and supporting documentation which was stored with the report. The documentation indicates that two rifle ranges and a sub-machine gun range were built and used on the leased property for a period of ten months, ending in March of 1944.
2. On 19 Nov 96, a site inspection re-confirmed, that the berms had been re-plowed into the ground by the owners and the fields returned to agricultural use. Inspection of the areas which had once been the back stops, revealed no surface evidence of small arms residue or any other type of conventional ordnance.
3. On 4 Dec 96, a new RAC Score Sheet was prepared for conventional ordnance. The score was a RAC 5, no further action recommended.
4. POC is the undersigned at (314) 331-8787.

THOMAS E. MURRELL  
Project Manager

Attached  
RAC Score Sheet

**ATTACHMENT D**

**TERRASERVER 1996 AERIAL OF SITE**



USGS 37 km SW of St. Louis, Missouri, United States 01 Mar 1996



0 1.5Km 0 1.25Mi



USGS 37 km SW of St. Louis, Missouri, United States 01 Mar 1996

